

A LABORATORY STUDY ON THE PROPERTIES OF ALLUVIAL MARINE SOIL: CASE STUDY OF PERAI AREA

By

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DECLARATION

I Aina binti Adam, 2003479578 confirm that the work is my own and that other appropriate credit has been given where reference has been made to the work of others.

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11th May 2007

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ABSTRACT

The objectives of this research were to carry out a laboratory testings on disturbed soil sample of Perai alluvial soil. Laboratory studies were conducted to determine the index properties and the shear strength of the alluvial soil. The laboratory studies were divided into two parts which were laboratory strength test and classification tests. The study involved collection of samples from underneath the Penang Bridge. Based on the test, the alluvial marine soil has been classified as either SILT of high plasticity or CLAY of high plasticity. The shear strength parameters of the soil which is cohesion and friction angle were 6.2 kPa and 20° respectively.

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